

REMARKS

Claims 1-9 and 12-23 are pending in the application. Claims 1 has been amended to include subject matter related to Claim 21 and as found in the specification as originally filed. Support for all amendments can be found in the specification as originally filed. Applicants would like to thank the Examiner for the indication of allowable subject matter and accordingly have included a new independent Claims 22 and 23 that include the subject matter of Claims 13 and 14, respectively.

In particular, Claim 1 has been added to include subject matter "wherein the syringe retaining mechanism is actuated by the syringe adapted to releasably engage the syringe when the syringe is moved in at least one of an axial direction or a vertical direction." Support for the amendment including "adapted to releasably engage the syringe when the syringe is moved" is related to subject matter of Claim 21 and support may be found in the specification, including at, page 33, para 4, lines 1-6, page 34, para 3, lines 1-11, page 35, para 1, lines 1-5, page 35, para 2, lines 7-10, page 35, para 4 to page 36 line 3.

REJECTIONS UNDER 35 USC 102(e)

Claims 1-9 stand rejected under 35 USC 102(e) as being anticipated by U.S. Patent No. 6,368,307 to Ziemba (hereinafter "Ziemba"). This rejection should be withdrawn in view of the remarks and amendments made herein above.

The Office Action alleges that "Ziemba teaches a power injector with a syringe (40), a housing (11), a drive member (within 11), a syringe retaining mechanism (15) with capture members (50) engaging retaining members on the syringe (44), with an actuator (25) to release the syringe."

Ziemba discloses the structure of the injector 10 having a mounting head 15, specifically including:

According to one embodiment of the invention, the locking mechanism 25 includes a iris-like gripping mechanism 50 for holding the syringe 40 firmly in its operating position in the holder 15. The gripping mechanism 50 includes a

plurality of gripping elements which preferably have gripping surfaces that encircle most of the circumference of the syringe body 31. In this embodiment, a pair of jaws 51,52, is provided, each jaw being pivotally connected to the housing 17 of the head 15 at respective pivot pins 53,54 which are fixed to the housing 17. The jaws 51,52 have inner concave gripping surfaces 55,56 having curvatures that correspond to the curvature of the outer surface of the body 41 of syringe 40. Preferably, the surfaces 55,56 of the jaws 51,52 each encompass an arc of between 90.degree. and 180.degree., so that when the jaws 51,52 are closed (FIG. 3) the surfaces 55,56 substantially surround the body 41 of the syringe 40 and securely hold the syringe in the operating position. The jaws 51,52 are spaced forward of the stop 32 so that, when the syringe 40 is in its operating position, the syringe flange 45 is held flat against the stop 32 by the jaws 51,52.

The jaws 51,52 are simultaneously moved between retracted positions (FIG. 2) and locked positions (FIG. 3) by a camming action of the mechanism 25, which is provided by a pair of cam follower pins 57,58 mounted on the ring 27 to move with and be actuated by the handle 26. (Col. 5, line 45 to Col. 6, line 2)

According to another embodiment of the invention, an alternative head 15a is provided in which the syringe 40 is held in its operating position by an alternative gripping mechanism 50a having a set of four slid able jaws 71-74, as illustrated in FIGS. 5-7 (Col. 6, lines 24-28).

Thus, Ziemba discloses two embodiments of gripping mechanisms each that are actuated by a mechanical attachment, for example, an attached handle. The syringe is merely placed within the gripping mechanism and then the gripping mechanism is activated via a handle to close the gripping mechanism around the syringe to hold it in place. The release of the syringe is accomplished in the similar manner via the handle. Because Ziemba causes retention and release of the syringe via the handle only, there is no disclosure of "the syringe retaining mechanism [that] is actuated by the syringe to adapt to releasably engage the syringe when the syringe is moved in at least one of an axial direction or a vertical direction" of Applicants' invention.

Thus, Ziemba does not teach each and every element of Claim 1, therefore the rejection under 35 USC 102(e) should be withdrawn. Reconsideration is respectfully requested.

Regarding Claim 21, as discussed above Ziemba discloses a system that

requires mechanical actuation and movement of the gripping mechanism itself by a handle. Thus, Ziembra does not disclose Applicants' invention including "the syringe retaining mechanism includes at least one adjustable capture members adapted to adjust to and releasably engage the syringe based on syringe initiated actuation of the syringe retaining mechanism" of Applicant's invention of Claim 21.

Regarding Claims 2-9, Claims 2-9 depend from Claim 1, which as discussed is believed to be allowable. Therefore, Claims 2-9 are also believed to be allowable. Further, Ziembra does not disclose every element of Claims 2-9, and therefore does not anticipate Applicants' invention. Reconsideration is requested.

REJECTIONS UNDER 35 USC 102(b)

a. Claims 13, 16 and 17 stand rejected under 35 USC 102(b) as being anticipated by U.S. Patent No. 5,279,569 to Neer et al, (hereinafter "Neer"). This rejection should be withdrawn in view of the remarks and amendments made herein above.

The Office Action alleges that: "Neer teaches a syringe retaining mechanism (flange 85 coupled to pressure sleeve 31 and mounted on housing) adapted to be coupled with a syringe (32) being moveable upon rotation of the syringe from the relaxed (retaining position Fig 5) and tensioned (Fig 4) state, and retaining ring (connected to 140)."

It is well settled that in order for a prior art reference to anticipate a claim, the reference must disclose each and every element of the claim with sufficient clarity to prove its existence in prior art. The disclosure requirement under 35 USC 102 presupposes knowledge of one skilled in art of claimed invention, but such presumed knowledge does not grant license to read into prior art reference teachings that are not there. See Motorola Inc. v. Interdigital Technology Corp. 43 USPQ2d 1481 (1997 CAFC). It is also well-settled that a 35 USC 102 rejection must rest upon the literal teachings of the reference and that the teachings must disclose every element of the claimed invention in as complete detail as is contained in the claim (See. Jamesbury

Corp v. Litton Industrial Products, Inc. 225 USPQ, 253, 256 (CAFC 1985); *Kalman v. Kimberly-Clark Corp* 218 USPQ 781, 789 (Fed. Cir. 1983)).

Applicants' invention of Claim 13 is direct to an injector including "a retaining mechanism associated with the housing for releasably engaging the syringe, the retaining mechanism being movable upon rotation of the syringe between a relaxed state, where the syringe is engaged by the retaining mechanism, and a tensioned state, where the syringe is released from the retaining mechanism." This novel aspect of the invention includes in one non-limiting embodiment that:

The operation of release/connector mechanism 4480 is essentially the same as with previous embodiments. When syringe 4012 is inserted through flex ring 4486, the two segments 4494, 4496 of flex ring 4486 spring apart into a tensioned state until ridge 4044 on syringe 4012 clears the rear edge of the segments 4494, 4496 of flex ring 4486. When ridge 4044 clears flex ring 4486, springs 4502, 4504 return to a relaxed state and draw segments 4494, 4496 into engagement with syringe 4012. When segments 4494, 4496 return to a relaxed state, they preferably provide an audible "click".

To remove syringe 4012 from release/connector mechanism 4480, syringe 4012 is rotated approximately one-quarter turn. As before, syringe 4012 is provided with projections 4505 that engage grooves 4510 on the interior surface of rotating ring 4506. As rotating ring 4506 is turned, arms 4518, 4520 move outwardly from a relaxed position to a tensioned position and apply pressure to posts 4492 to urge segments 4494, 4496 of flex ring 4486 apart. Once the syringe is rotated a sufficient distance, segments 4494, 4496 are sufficiently separated from one another to release syringe 4012, preferably with an audible "click". (Specification, para 384 and 385].

However, Neer discloses in FIGS. 2 and 6, "the ring 127 has an inner periphery 149 which is larger than the circumference of the body 55 of the syringe case 50. Accordingly, when the syringe 32 is inserted in the jacket 31, the proximate end 56 of the syringe case 50 extends through and is surrounded by the inner periphery 149 of the ring 127." (Col. 11, lines 41-46). Further, Neer discloses that the "rotation of the mechanism 125 from the unlocked position to the locked position rotates the syringe 32 in the jacket 31 and rotates the cap such that its threads move from an unlocked position as shown in FIG. 4 to the locked position of FIG. 5, to secure the cap to the

jacket 31 by the engagement and tightening of the threads 85 and 86." (Col. 12, lines 5 to 11). In fact, Neer discloses that:

The syringe 32 includes structure that is configured to lock the syringe 32 to the front end of the jacket 31 by cooperating with mating structure on the jacket 31. The jacket 31 has, spaced around the circumference thereof near the remote or front end 35 of the jacket 31, four equally spaced outwardly projecting thread sections 85. These thread sections 85 are slightly less than 45.degree. in extension around the circumference of the jacket 31 and are spaced apart with gaps of slightly greater than 45.degree.. The cap 51 has a cylindrical rim 87 in which are formed four similarly sized and spaced mating thread sections 86. The thread sections 86 project inwardly toward the jacket 31 when the syringe 32 is positioned in the jacket 31. As such, when the syringe 32, with the cap 51 assembled to it is inserted into the jacket 31, the threads 86 of the cap 51 pass through the spaces between the threads 85 on the jacket 31 to a point behind the threads 85. When so inserted, the syringe assembly 32 with the cap 51 may be twisted clockwise 45.degree. to tighten and thereby secure the cap 51 to the jacket 31 by engagement between the threads 85 and 86 as shown in FIG. 5, to thereby lock the syringe in the bore 33. (Col. 8, line 63 to Col.9, line 17).

Thus, Near has a syringe and any movement of it merely causes the syringe to be twisted into the jacket by threads. Therefore, Neer does not disclose the injector of Applicants' Claim 13 including "a retaining mechanism associated with the housing for releasably engaging the syringe, the retaining mechanism being movable upon rotation of the syringe between a relaxed state, where the syringe is engaged by the retaining mechanism, and a tensioned state, where the syringe is released from the retaining mechanism."

Claims 16 and 17 depend from Claim 13, which as discussed herein is believed to be allowable. Further, Neer does not disclose the inventions of Applicants' claims 16 and 17. Thus, Claims 16 and 17 are also believed to be allowable. Accordingly, reconsideration of Claims 13, 16, and 17 is respectfully requested as the reference does not disclose each and every element of the claim with sufficient clarity to prove its existence in prior art.

REJECTIONS UNDER 35 USC 103

Claim 12 stands rejected under 35 USC 103(a) as being unpatentable over

Ziemba in view of U.S. Patent 5,383,858 to Reilly et al., (hereinafter "Reilly"). This rejection should be withdrawn in view of the remarks and amendments made hereinabove.

As discussed above, Ziemba does not disclose Applicants' invention including that of independent Claim 1. Further, Reilly fails to remedy any of the deficiencies of Ziemba.

Further, Claim 12 depends from Claim 1, which as discussed herein is believed to be allowable. Thus, Claim 12 is also believed to be allowable. Accordingly, reconsideration of Claim 12 is respectfully requested.

In view of the above amendments and remarks, Applicants submit that the claims are in condition for allowance and the Examiner would be justified in allowing them.

Respectfully submitted,

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I hereby certify that this correspondence is being submitted electronically to the United States Patent and Trademark Office on April 12, 2007.

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